

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 35

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte RUDY A. VANDENBELT  
and TROY G. ANDERSON

Appeal No. 2003-2099  
Application No. 08/706,136

MAILED

MAR 31 2004

PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

ON BRIEF<sup>1</sup>

Before MARTIN, RUGGIERO, and LEVY, Administrative Patent Judges.  
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-12, and 14-19, which are all of the claims pending in this application.

<sup>1</sup> The Oral Hearing scheduled for March 18, 2004 was waived by appellants in a communication filed, via facsimile, on January 5, 2004.

BACKGROUND

Appellants' invention relates to a customizable digital sound relaxation system. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced as follows:

1. An improved-customizability digital sound relaxation and noise masking system, comprising:

a digital sound relaxation device having operator input sound selection means, a built-in memory, said memory having pre-selected and prerecorded sounds selectable for individual replay, and a sound controller that is coupled to said memory and said operator input means and operative in built-in sounds replay mode (1) to play any sound of said built-in memory selected via said operator input sound selection means and (2) to repetitively replay it so as to create a sound environment that masks noise and soothes the listener without disrupting pauses; and

a collectable sound card having prerecorded, pre-selected sounds therein cooperative with said digital sound relaxation and noise masking device to make available its sounds for replay by said digital sound relaxation and noise masking device, thereby customizing the sounds playable by said digital sound relaxation and noise masking device to the tastes of the user in accord with the particular collectable sound card collected, such that the sound controller thereof is operative in sound card sounds replay mode (1) to play any sound of said collectable sound card selected via said operator input means and (2) to repetitively replay it so as to create a sound environment that masks noise and soothes the listener without disrupting pauses.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Smith

5,619,179

Apr. 8, 1997  
(filed Oct. 31, 1994)

Kramer WO 83/01705 May 11, 1983  
(Great Britain Publication)

Claims 1-12, and 14-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of Kramer. Rather than reiterate the conflicting viewpoints advanced by the examiner and appellants regarding the above-noted rejection, we make reference to the examiner's answer (Paper No. 28, mailed January 14, 2002) and the final rejection (Paper No. 24, mailed February 26, 2001) for the examiner's complete reasoning in support of the rejection, and to appellants' brief (Paper No. 27, filed August 27, 2001) and Declaration of Mr. Troy G. Anderson (Paper No. 26, filed August 27, 2001) for appellants' arguments thereagainst. Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered. See 37 CFR 1.192(a).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejection advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise,

reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the brief along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

Upon consideration of the record before us, we affirm-in-part. We begin with claim 1.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d

1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

The examiner's position (final rejection, page 2) is that Smith does not show a collectible sound card associated with the device. To overcome this deficiency in Smith, the examiner turns to Kramer for a teaching of providing extra sound entertainment from a collectable sound card. The examiner asserts (final rejection, pages 2 and 3) that it would have been obvious to apply the teachings of Kramer to the device of Smith "so that more different choices of sound signals could have been accessed by the user."

Appellant asserts (brief, page 8) that there is no motivation to combine the teachings of Smith and Kramer in order

to provide the claimed combination. It is argued (id.) that the combination of record is based upon impermissible hindsight alone, and that the examiner has mischaracterized the Kramer reference, attributing to it a feature that it in fact does not possess. It is argued that Kramer does not disclose a "system which can provide extra sound entertainment from a collectible sound card," because (brief, page 9):

There can only be the disclosure of "a system which can provide extra sound entertainment from a collectible sound card" if the alleged sound reproduction system is already capable of playing at least one built-in sound with respect to which the added sounds may be said to be "extra." But if the sound system in question cannot already play some sounds - as in the Kramer reference - but is only capable of playing the sounds of the added sounds, the added sounds are in no sense "extra".

Appellant additionally argues (brief, pages 11 and 12) that:

It is respectfully submitted that the special sound effects generator of Smith and the digital processing and storage card and cooperative sound reproduction unit of Kramer, each taken as a whole and all taken together, fail to teach or even remotely suggest the recited collectible sound card having prerecorded sounds therein and a digital sound relaxation and noise masking device operable in built-in and sound card replay modes cooperative therewith to make the sounds of the collectible sound card available for replay by the sound controller thereof in addition to the built-in sounds of the digital sound relaxation and noise masking device of the claimed combinations

as a whole of the independent claim[] 1 and claim 14 of the present invention.

From our review of Smith, we find that the reference is directed to electronic sound generators used for personal entertainment, recreation, relaxation, and to promote sleep. The equipment provides the sounds of rain, falling water, wind, etc. The sounds are used to mask out excessively loud and distracting ambient noise, to sooth the user, and even to help the user fall asleep (col. 1, lines 16-21). Other types of sound generators are used to generate sounds associated with running or rushing water; i.e. white noise (col. 1, lines 35-47).

In a first embodiment, sounds are generated from first and second synthesizer IC circuits, each of which has a stored library of continuous sound loops (col. 2, lines 12-15). A user controlled selection switch allows both ICs to output the same or a different loop of stored sounds from the libraries. In a LOCK mode, the ICs are clocked at a different clock rate. This creates an offset between the left and right channels that produces an interesting pseudo-stereo effect (col. 2, lines 23-33). In the UNLOCK mode, the ICs are clocked at slightly different clock rates, causing a relative offset in time, to generate a continuously varying sound pattern. As the two loops

continue to drift in relative time offset, the sound will eventually revert to a pseudo-stereo sound (col. 2, lines 34-51).

In a second embodiment, an electronic sound generator includes two white noise generators that output sound for the left and right channels. A wave/rain switch allows users to select between the two sounds. Sounds ranging from a light rain to a lower frequency waterfall may be produced (col. 2, lines 52-64).

Smith further discloses (col. 2, line 65 through col. 3, line 3) that the two embodiments may be combined into a single electronic sound generator. The use of two identical ICs and noise generators can produce truly surprising spatial and sound depth responses. From this disclosure of Smith, we find that Smith discloses the use of internally stored and/or generated sounds. However, Smith additionally discloses (col. 3, lines 51-55) that "[s]tereo earphones, (not shown) are connected to jack J2, which permits a user to listen to the generated audio, and/or to an external source of audio, e.g., a CD player, optionally provided to stereo jack J1." From this disclosure, we find that Smith specifically discloses using his invention in conjunction with an external source of sound, to be provided to stereo jack J1. From the disclosure of using a CD player to produce the

sound, we find that the user can select from a selection of sounds on a CD. From the disclosure that the user can listen to the generated audio, and/or the external source of audio, we find that a user can either listen to generated sounds, or external audio sounds, or to both internally generated and external audio sounds. Smith additionally discloses that in addition to listening to a generated sound, such as a brook, in one ear, a user can listen to a rain sound in the other ear. In addition, the user can listen to these generated sounds along with any noise-generation sounds provided by unit 10, and any externally generated sounds input to jack J1. Smith additionally discloses (col. 10, lines 38-48) that:

The present invention can also combine externally generated sound with sound generated by unit 10. For example, a user who is a passenger on an airline may wish to input the airline audio through input jack J1, and then listen to a combination of the airline audio and sound generated by unit 10. The result can be very relaxing in that unit 10 generated sounds can mask the ambient noise in the cabin, permitting easier listening to the airline audio. If the user wishes to go to sleep, the airline audio can be unplugged from jack J1, leaving only the sounds generated by unit 10.

From the disclosure of Smith that a user can listen to a combination of airline audio and sound generated by the unit 10, we find further evidence that Smith specifically teaches the use

of the invention in combination with externally generated sound, or that the externally generated sound may be disconnected, leaving only the internally generated sound.

Turning to Kramer, we find that Kramer is directed to a credit-card sized portable system having a magnetic bubble memory which records music (page 1). The system includes a card (figure 1) and a card playback device (figure 2). Kramer discloses (page 1) that cards of the type used have the memories arranged so as to allow immediate recall of the data in any part of the memory. We find from this disclosure of Kramer that a user can select the data from any portion of the card for recall. The replay system may permit retrieval of data from one or more cards (page 3). For replay, the card is placed in a replay location (figure 2) with an input 44 contacting card output 15 (page 7). Once started, the replay continues until the end of the recording is reached or until another command is sent to the card (page 8). As shown in figure 2, controller 58 is connected at 76 to external control means, such as press-buttons, for the replay unit, in the manner of a tape cassette machine (page 9). The replay unit, apart from the speakers or headphones, can be very compact, e.g., little larger than the storage card itself. The unit can have a slot extending within its body, for receipt of a

card (page 10). In addition, a single replay unit can be arranged to receive a plurality of cards, and the control means can be arranged so that the cards can be played in any specific sequence. The device can be used in place of gramophone record disks or pre-recorded tape cassettes (pages 10 and 11).

From the disclosure of Kramer, we find that Kramer discloses a compact card and replay system that receives the card in a slot extended within the body of the replay device. The card and replay unit can be used instead of a phonograph record or a tape cassette. In addition, from the disclosure of plural cards, and the connection to control means with press-buttons, we find that a user can select which selection to play from a card, as well as which card to play from a plurality of cards.

From these teachings of Smith and Kramer, we find that an artisan would have been motivated to use the card system of Kramer as the external source of sound in Smith. In particular, we find the specific teaching of Smith of having an external source of sound, to be played at the same time as the internally generated sound, as a teaching of providing an external sound source. From the teachings of Smith of using a CD or airplane audio as the source of external sound, and the teaching of Kramer of using a card and replay unit in place of a phonograph record

or tape cassette, we find that an artisan would have been taught to use the card and replay unit of Kramer as the external source of sound. Thus, we find that the teachings of Smith and Kramer establish a prima facie case of obviousness with respect to claim 1.

Thus, as a prima facie case of obviousness has been established, we turn to appellants' arguments and Declaration as we review all of the evidence as a whole, in our determination of whether the evidence provided is sufficient to overcome the prima facie case of obviousness.

From our findings, supra, with respect to the teachings of Smith and Kramer, we are not persuaded by appellants' assertions that there is no motivation to combine the teachings of Smith and Kramer, or that the combination of the teachings of Smith and Kramer results from a hindsight reconstruction of appellants' invention. We agree with appellants (brief, page 9) that Kramer does not provide extra sound entertainment, because Kramer only discloses producing sound from the sound cards. However, we find the examiner's reference to extra entertainment to refer to "extra" to the extent that when combined with the internal sounds generated by Smith, that the sounds from the external sound card

producer "extra" entertainment when the internal and external sounds are taken together.

Nor are we persuaded by appellants' assertion (brief, pages 11 and 12) that:

It is respectfully submitted that the special sound effects generator of Smith and the digital processing and storage card and cooperative sound reproduction unit of Kramer, each taken as a whole and all taken together, fail to teach or even remotely suggest the recited collectible sound card having prerecorded sounds therein and a digital sound relaxation and noise masking device operable in built-in and sound card replay modes cooperative therewith to make the sounds of the collectible sound card available for replay by the sound controller thereof in addition to the built-in sounds of the digital sound relaxation and noise masking device of the claimed combinations as a whole of the independent claims 1 [sic] and claim 14 of the present invention.

As we found, supra, upon applying Kramer's card and replay unit as the external sound source disclosed by Smith, in replay mode, the resultant device will replay sounds from the sound card as well as from the internally generated sounds.

Turning to the Declaration of Mr. Troy Anderson, we have carefully considered both the Declaration, as well as the accompanying attachments A-E.

MPEP Eighth Ed., Rev. 1, April, 2003, §716.01(a)-(c) set forth, inter alia, that:

Affidavits or declarations containing evidence of . . . commercial success, . . . must be considered by the examiner in determining the issue of obviousness of claims for patentability under 35 U.S.C. § 103. The Court of Appeals for the Federal Circuit stated in Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983) that "evidence rising out of the so-called secondary considerations' must always when present be considered en route to a determination of obviousness . . ."

The weight attached to evidence of secondary considerations by the examiner will depend upon its relevance to the issue of obviousness and the amount and nature of the evidence. To be given substantial weight in the determination of obviousness or nonobviousness, evidence of secondary considerations must be relevant to the subject matter as claimed, and therefore the examiner must determine whether there is a nexus between the merits of the claimed invention and the evidence of secondary considerations.

Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 305 n.42, 227 USPQ 657, 673-674 n. 42 (Fed. Cir. 1985). The term "nexus" designates a factually and legally sufficient connection between the objective evidence of nonobviousness and the claimed invention so that the evidence is of probative value in the determination of nonobviousness . . . Objective evidence which must be factually supported by an appropriate affidavit or declaration to be of probative value includes evidence of . . . commercial success. . .

From our review of the Declaration, we find that the only reference to the language of the claims is found on page 2

(Paragraph 8) where appellants make broad reference to a collectable sound card in cooperation with the digital sound relaxation and noise masking device of independent claims 1, 5, 10, 14, 15 and 17. The Declaration (id.) points out that Headwaters, Research & Development, Inc. has achieved sales of about \$10 million dollars per annum, representing about 17% of the market share. We find from Attachment A information describing a number of different collectable sound cards. We find from Attachment B a graph indicating that "sound variety ranks as the most valued sound conditioner attribute." We find from Attachment C 4 Warranty Reply Cards, where the respondents have indicated their level of satisfaction with the Tranquil Moments Device, which they have either purchased or received as a gift. Attachment C additionally includes a testimonial letter from a satisfied customer. We find from Attachment D five additional Warranty Reply Cards which indicate the importance these customers give to the ability of using different sound cards. From Attachment E, and paragraphs 17 and 18 of the Declaration, we find a graph and an indication that even though sound cards are separately sold, that almost 2/3 of the customers go on to separately purchase sound cards.

From our review of the Declaration, we find evidence indicating the importance of the sound card in the invention. However, we find that the Declaration, because it makes only brief reference to the language of the claims, does not provide a specific nexus between the claimed subject matter and the commercial success of the device. We find no evidence indicating whether the commercial success enjoyed by appellants was due to the claimed invention, or whether it was due to other factors, such as pricing, advertising, or market strategy.

From all of the above, we find that balancing all of the evidence and arguments presented against the strength of the prima facie case, that the evidence of nonobviousness fails to outweigh the evidence of obviousness. Accordingly, the rejection of claim 1 under 35 U.S.C. § 103(a) is affirmed.

We turn next to claim 2. Appellants present no specific arguments with respect to claim 2. From appellants' lack of argument and the disclosure of Kramer (page 10) that the card is placed with its respective connections 12, 13, 14, 15 in contact with the sockets 44, 46, 50, 52, and that the replay unit can have a slot extending within its body for receipt of the card, we find that Smith as modified by Kramer meets the limitations of claim 2.

We turn next to claim 3. Appellants assert (brief, page 12) that the prior art does not suggest a sound card selector switch for reassigning sound selector switches between the sound card and the built-in sounds. We agree. Although we find, supra, from the teachings of Smith and Kramer that the prior art would have a sound card selector switch for selecting which sound card sounds to be played, we find no teaching or suggestion of having a sound card selector switch reassign sound selector switches. The examiner's unsupported assertion of obviousness (answer, page 3) is not a substitute for evidence, and fails to establish a prima facie case of obviousness of claim 3. Accordingly, the rejection of claim 3, and claim 4, which depends therefrom, is reversed.

We turn next to independent claim 5. The examiner refers us to the rejection of claims 1 and 2 in support of the rejection of claim 5. From our review of the record, we will not sustain the rejection of claim 5 for the same reasons that we reversed the rejection of claim 3. Accordingly, the rejection of claim 5, along with dependent claims 6-8 and multiple dependent claim 19/5 is reversed.

We turn next to claim 9. The examiner's position (answer, page 3) is to take Official notice that the storage of audio

signals in a sound bit format is old and well known in the art. From this, the examiner concludes that it would have been obvious to have used a sound bit format as a well known alternative format. Appellants assert (brief, page 14) that the limitations of claim 9 are not suggested by the prior art, and request that the examiner provide a reference to support the position taken. The examiner (answer, page 7) maintains the position of record, and has not provided evidence to support the position that the claimed sound bite format is old and well known in the art.

From our review of the record, we find no evidence to support the examiner's position that it is old and well known to use a sound bite format defining at least two (2) groups of memory locations, such that another self-contained and complete-in-itself version of the same sound is stored in each of said at least two memory locations, as required by claim 9. Accordingly, we agree with appellants that the examiner has failed to establish a prima facie case of obviousness of claim 9. The rejection of claim 9, as well as claims 12 and 19, which contain similar language, is reversed.

We turn next to claim 10. The examiner (answer, page 3) refers us to the rejection of claim 2 in support of the rejection of claim 10. Appellants assert (brief, page 13) that because

Smith does not teach the use of a collectable sound card, and Kramer is only adapted for a sound reproduction unit which otherwise has no sounds to play, that the prior art does not suggest the invention of claim 10. We make reference to our findings supra, with respect to Smith and Kramer with regard to claims 1 and 2. We will sustain the rejection of claim 10 based upon our findings with respect to claims 1 and 2. Accordingly, the rejection of claim 10 under 35 U.S.C. § 103(a) is affirmed.

We turn next to claim 11. Appellants present no arguments with respect to claim 11. From the lack of any argument by appellants, and the disclosure of Smith (col. 4, lines 53-56) that the sounds are stored as continuous loops, we find that the teachings of Smith and Kramer teach or suggest the limitations of claim 11. The rejection of claim 11 under 35 U.S.C. § 103(a) is therefore affirmed.

We turn next to independent claim 14. As the same arguments have been presented for claims 1 and 14 (brief, pages 11 and 12) we affirm the rejection of claim 14 for the same reasons that we affirmed the rejection of claim 1, supra.

We turn next to independent claim 15. The examiner (answer, page 3) refers us to the rejection of claims 1 and 2 in support of the rejection of claim 15. Appellants present the same

arguments for claim 15 as were presented for claim 5. However, unlike claim 5, claim 15 does not recite a sound card selector switch for reassigning sound selector switches, notwithstanding appellants' assertions to the contrary. We make reference to our findings, supra, with respect to claim 1. In addition, from the disclosure of Smith (col. 10, lines 46-48) that the airline audio may be unplugged from jack J1, leaving only the sounds generated by unit 10, we find that the combined teachings of Smith and Kramer would have suggested the limitations of claim 15. Accordingly, the rejection of claim 15 under 35 U.S.C. § 103(a) is affirmed.

We turn next to claim 16. As claim 16 has not been argued by appellants, and the teachings of Smith and Kramer suggests having a collectable sound card with a library of sounds selectable for individual replay, we find that the teachings of claim 16 are met by the teachings of Smith and Kramer. Accordingly, the rejection of claim 16 under 35 U.S.C. § 103(a) is affirmed.

We turn next to claim 17. We make reference to our findings, supra, with respect to claim 1. Appellants present the same arguments for claim 17 as were presented for claim 10 (brief, page 13). Accordingly, we affirm the rejection of claim

17 under 35 U.S.C. § 103(a) based upon the same reasons as we affirmed the rejection of claim 1.

We turn next to claim 18. Appellants present no arguments with respect to this claim. Accordingly, we affirm the rejection of claim 17 under 35 U.S.C. § 103(a) based upon the same reasons as we affirmed the rejection of independent claim 15.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 2, 10, 11, and 14-18 under 35 U.S.C. § 103(a) is affirmed. The decision of the examiner to reject claims 3-9, 12, and 19 under 35 U.S.C. § 103(a) is reversed. No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136 (a).

AFFIRMED-IN-PART

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